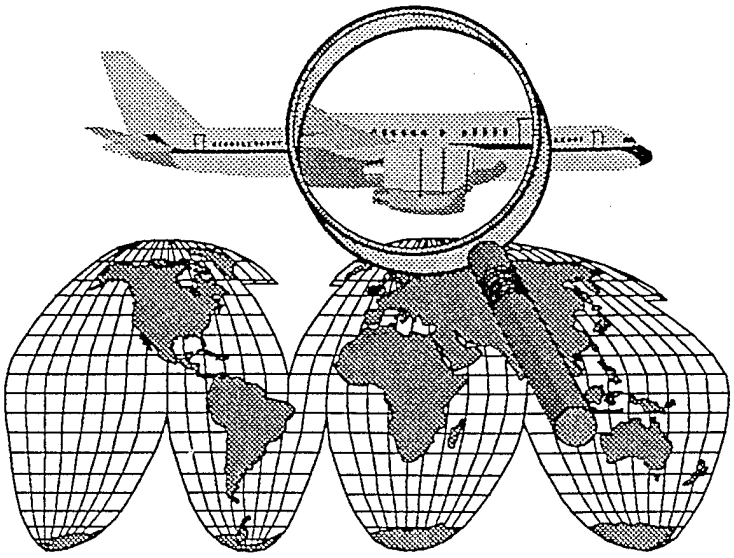
Department of Defense Travel Reengineering Pilot Report to Congress



Office of the Under Secretary of Defense (Comptroller)

June 1997

EXECUTIVE SUMMARY

The Department of Defense (DoD) Temporary Duty (TDY) Travel Reengineering Initiative is a revolutionary financial management improvement program which will change the way people work in the DoD. It is designed to help the Department more closely operate to commercial business standards envisioned for the twenty-first century, with a view toward cost optimization and performance excellence. It innovatively will employ commercially available Electronic Commerce/Electronic Data Interchange (EC/EDI) capabilities to integrate functions, automate edit checks for internal controls, and create user-friendly management tools at all levels of the process.

The DoD TDY travel reengineering initiative has changed bureaucratic culture and regulation by emphasizing delegation and decentralization of management authority. It fundamentally has changed the regulatory framework for conducting federal travel, has engaged industry in new and innovative business solutions, and has adopted the best financial management practices of the private sector. The initiative will rely on emerging digital signature technologies in an automated, interactive flow of financial and transportation processes and information accessible to all system users. It is the leading edge in providing a seamless, paperless, electronic business system in the federal sector, and is the model for future DoD business process recurring work functions.

The Need for Travel Reform. The primary DoD mission is to provide for the common defense of the United States and its interests worldwide. In performance of this mission, DoD spends approximately $3 billion annually on TDY travel. Under existing processes, DoD's management overhead costs have been estimated to be 15 to 30 percent of the direct costs of travel, compared to an industry average of 10 percent, and 5 percent for best-in-class category. The reengineering initiative is transforming the excessively costly and burdensome paper-based processes used in TDY travel into a streamlined, integrated, and paperless process that meets mission needs, reduces costs, and provides superior customer service.

Other travel processes, including those used to accomplish Permanent Change of Station (PCS), relocation, and Inactive Reserve force travel, remain a challenging opportunity for improvement; they will be addressed at a later time. The savings from increasing the efficiency of all forms of DoD travel - TDY, PCS/Relocation, and travel of Inactive Reserves, are expected to be substantial.

Achieving the transformation to the reengineered TDY travel concept has required senior leadership commitment to change rule-bound, compliance-oriented culture. It also has required partnership with the Congress, the General Accounting Office (GAO), and many government agencies to simplify statutes and regulations. Finally, partnership with private sector financial and

travel industries was required to adopt modern financial tools and commercial information technology products in support of the TDY travel process.

Initial Implementation in Pilot Test Sites. After significant start-up requirements, the DoD Reengineered TDY Travel concept of operations--using industry computational enablers - has been tested at 27 pilot sites at Army, Navy, Air Force, Marine Corps, and several Defense Agencies in the Continental United States (CONUS) and overseas (OCONUS) installations. The pilot sites included a test population of over 50,000 personnel across all DoD Components. Preliminary data resulting from the Pilot Tests indicate that average government labor costs per trip costs have decreased by 56 percent, payment cycle time decreased by 48 percent, and traveler and authorizing official (AO) satisfaction increased by close to 100 percent on many critical indicators. The test program yielded a robust body of performance and customer satisfaction data, which demonstrated that the Reengineered TDY Travel concept of operations is accepted and workable in a variety of operational environments.

Although the data collection period has been completed, many pilot sites will continue to operate using the simplified entitlements. These sites will continue on this basis until they are incorporated into the Defense Travel System (DTS).

Lessons Learned. A significant lesson learned from the Pilot Test program is a greatly improved understanding of the applicability of EC/EDI commercial standards and practices in the travel process, and the implications for worldwide trading partner infrastructure and connectivity requirements by DoD Information Technology managers. Another significant outcome is the ability to understand computational software validation requirements for commercial off-the-shelf (COTS) software.

Finally, a significant result of the Travel Reengineering Pilot Test Program has been the recognition of the new business relationships which support the federal travel process. The project has received the attention of the entire travel industry. The reengineered process now is being implemented by the DoD, based on best industry practices.

Next Steps. The Department has taken several steps toward implementation of the new DTS. The Request for Proposal (RFP) for Defense Travel Region (DTR) 6 is being released in June 1997, with contract award anticipated in December 1997. System testing in DTR 6 is scheduled for the second quarter of fiscal year (FY) 1998. Incremental worldwide implementation of the DTS will begin in April 1998.

Congressional Interest. The FY 1996 National Defense Authorization Act addressed DoD travel reform in Section 356, "Program for Improved Travel Processes for the Department of Defense." The Department has been in general compliance with Section 356 requirements of the test program, evaluation criteria, test plan, and reporting.

SECTION 1
THE DOD TDY TRAVEL CONCEPT OF OPERATIONS

The current DoD TDY travel system was never designed to be an integrated system, nor was it treated as a system. It evolved over many years. Policies for the individual pieces of the current travel system are issued under the cognizance of three Under Secretaries of Defense: USD (Comptroller), USD (Acquisition and Technology), and USD (Personnel and Readiness).

The policies of the three Under Secretaries are closely inter-related; yet, their development and implementation were often accomplished by the respective process owners in relative isolation. Thus, the process has been severely "stovepiped." There was no vehicle in the current structure to overcome these deficiencies, as no one individual within the Department was specifically responsible overall for the TDY travel system.

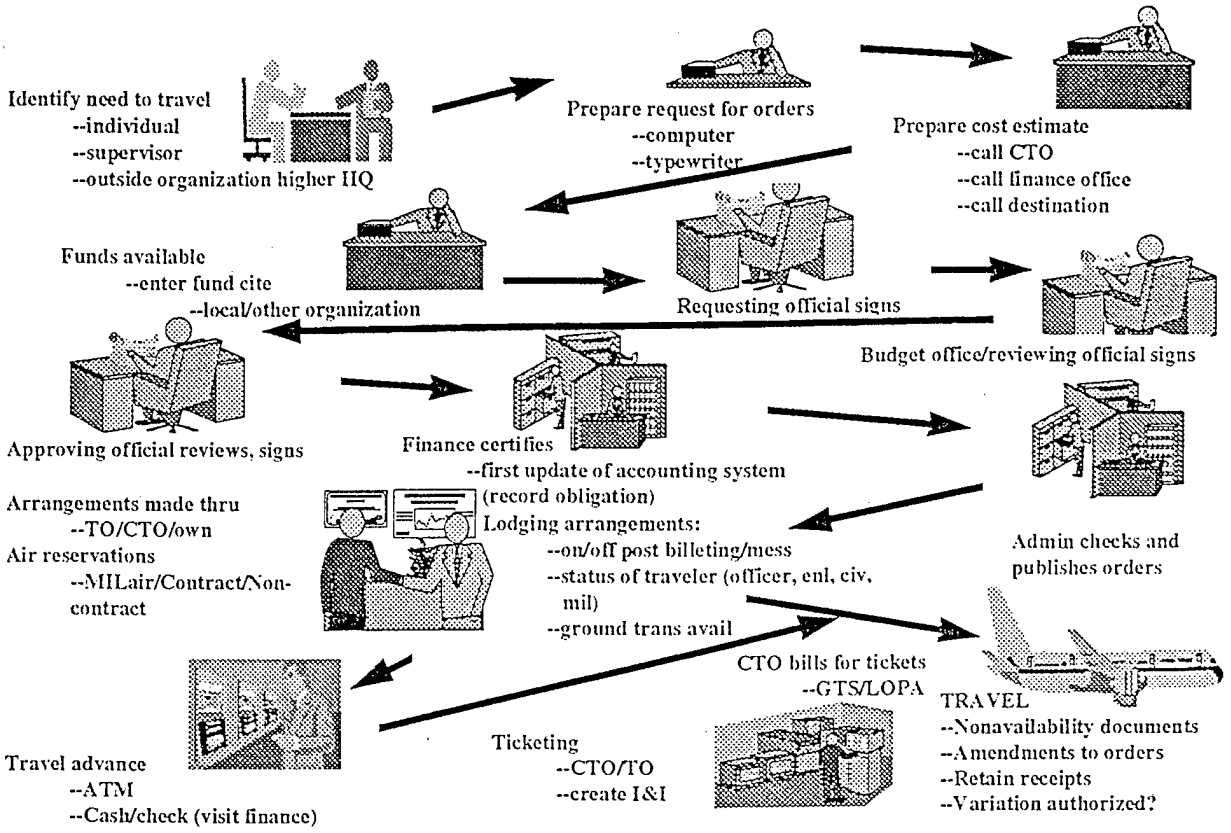
In July 1994, the three Under Secretaries chartered a task force to Reengineer Travel to examine the TDY travel process throughout the Department and to "develop a fair and equitable TDY system for all DoD organizations." A copy of the task force report, which was provided to the Congress in January 1995, is attached to this report. The current travel system, as documented in the task force report, is at Figure 1-1 (pretravel) and Figure 1-2 (posttravel).

The DoD Reengineered TDY Travel concept of operations includes a vision statement and ten guiding principles. The vision for the new TDY travel management system is: *A seamless, paperless system that meets the mission needs of travelers, commanders and other travel resource managers, reduces the cost of travel, and provides superior customer service.* Underlying this vision are a set of principles which can be summarized as: delegate authority, simplify rules, and use best industry practices. The envisioned reengineered Defense Travel System, as recommended in the concept of operations, is at Figure 1-3 (pretravel) and 1-4 (posttravel).

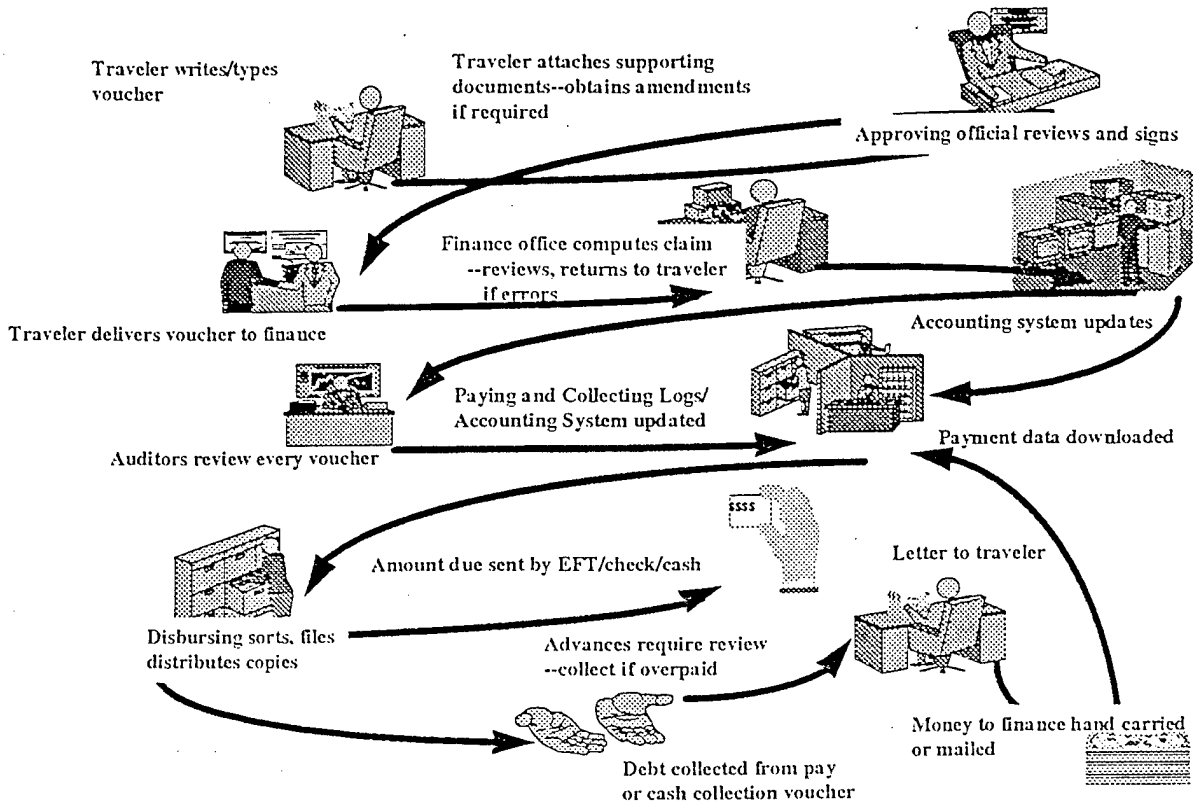
Furthermore, the DoD TDY concept of operations integrates policies of the various parts of the travel system, such as travel arrangements, personnel entitlements, budgeting, accounting and financial management. The policies which support the various functional parts of the TDY travel system are embedded into COTS computational software which is modified for DoD use. The information resident in the COTS software will be shared by travelers, supervisors, and the travel industry to produce the authority to travel, reservations for travel arrangements, and financial accounting and disbursement of funds.

Inherent in the COTS software will be the capability to capture prenegotiated and best available transportation, lodging, and rental car rates; to flag exceptions to policy; to compute allowable expenses; to update organizational travel budgets; and to reimburse travelers through direct deposit to their bank accounts or to their charge cards. Robust internal controls include automated edit checks, supervisory approval, and postpayment random audit techniques developed by DoD in association with GAO, and serve as a model for future governmentwide oversight.

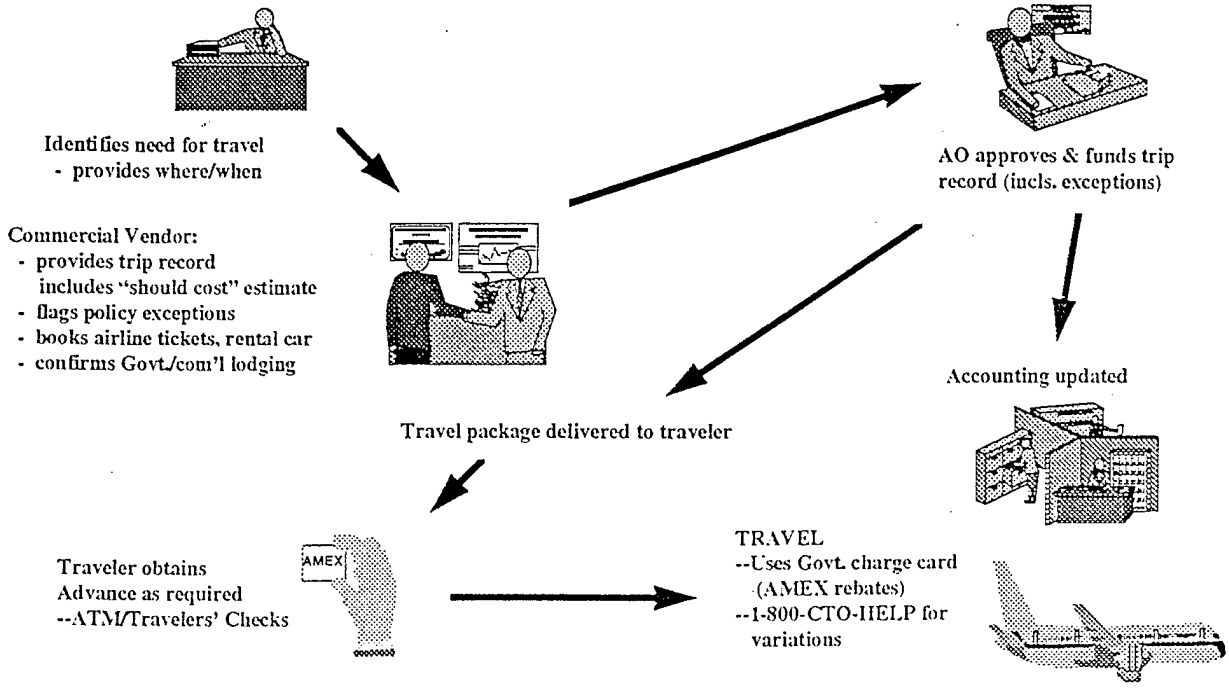
Current Travel System (pretravel)
Figure 1-1



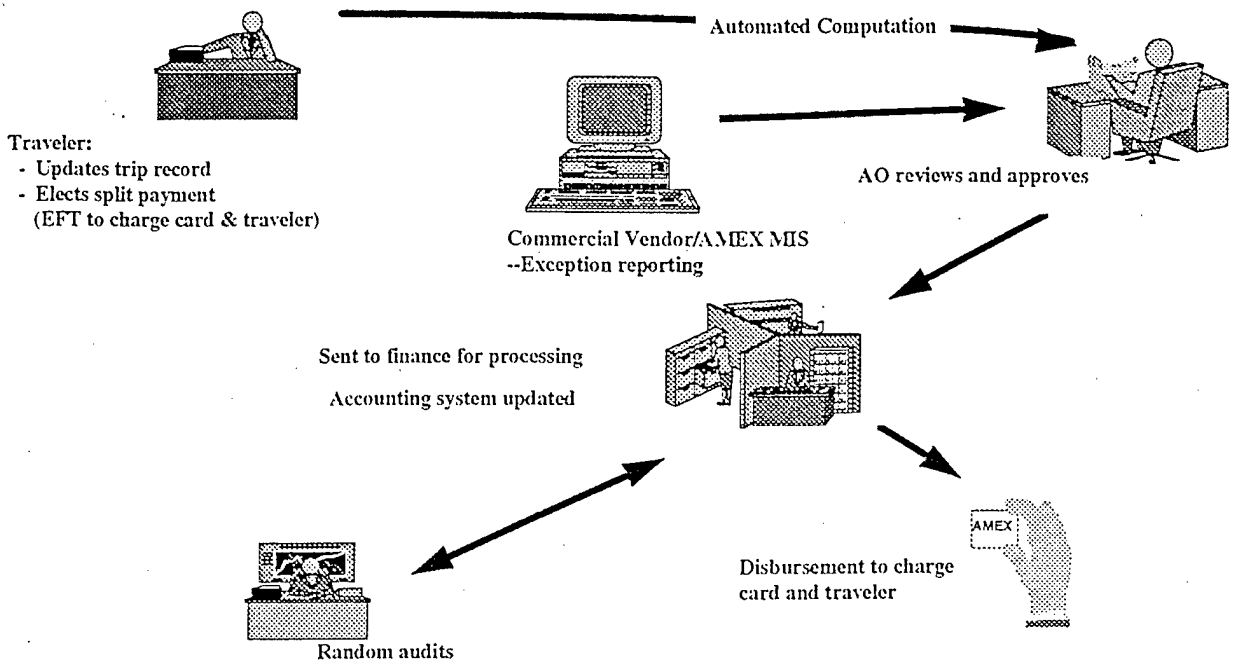
Current Travel System (posttravel)
Figure 1-2



Defense Travel System (pretravel)
Figure 1-3



Defense Travel System (post-travel)
Figure 1-4



SECTION 2
THE PILOT TEST PROGRAM

Major Objectives. The major objectives of the DoD TDY Travel Pilot Test Program were: (1) to test and evaluate as much of the TDY concept of operations as possible; (2) to identify industry capabilities; (3) to establish baseline and assess performance, customer satisfaction, and cost; (4) to use lessons learned to refine and implement the concept of operations and to modify the Statement of Work (SOW) for the Defense Travel System (DTS); and (5) to achieve "buy-in" among DoD organizations and personnel, who are the customers of the system.

Pilot Test Organizations. There were 27 pilot test organizations: Army (7), Navy (5), Marine Corps (2), Air Force (5), the Joint Staff, Washington Headquarters Services, and Defense Agencies (6). Of these, 25 were located in CONUS and 2 were OCONUS (USA Military Community - Stuttgart, Germany, and Headquarters, Commander in Chief (CINC) Pacific Fleet). The total test population was approximately 50,000 personnel. A listing of the pilot organizations is attached at Figure 2-1.

Test Program Milestones. The DoD pilot test organizations were nominated in June 1995; their test plans were received at OSD by October 30, 1995. (The FY 1996 Defense Authorization Act, with Section 356 requirements, was enacted on February 10, 1996. At that time, the DoD pilot program already was in place.)

There were several major requirements for the pilot programs to reach operational status. These steps included:

- Commerce Business Daily (CBD) "Sources Sought" Notice for COTS software vendors to respond to pilot requirements (August 1995).
- Responses from COTS vendors received (August 1995).
- Market Survey and Vendor Fair (September 1995).
- Completion of pilot/vendor agreements or contract modifications for use of COTS software (November 1995).
- Initial certification of pilot software selections by the Defense Finance and Accounting Service (DFAS) (February 1996).
- General Accounting Office (GAO) waivers for digital signature processing (March 1996).
- Software enablers installed/connectivity established/learning curve completed (June through November 1996).
- Baseline established for "as is" procedures (November 1996).
- "To be" procedure testing initiated (November 1996).
- Pilot testing data collection completed (March 31, 1997).
- Pilot Evaluation Conference (May 1997).
- Report to Congress (June 1997).

Pilot Program Costs. The incremental cost of pilot organization testing was approximately $4 million, which included costs for COTS software licenses, technical services for system interoperability and connectivity, and training. (Although total monetary investments for the new DTS have not been established, pilot program costs have been interpolated into cost estimations for the DTS acquisition planning process.)

Requirements for Testing. There were several requirements for pilot organizations to accomplish before they could initiate testing of the reengineered travel concept of operations. They were:

- **Test Plan.** In August 1995, the Department issued guidance for test planning and implementation. Each pilot organization was tasked with preparing a test plan and submitting it to its Military Service or Defense Agency headquarters for approval. Pilot testing was authorized after the test plan was approved and the requirements listed below were met.

- **Baseline Established.** Pilot organizations reported baseline data on the amount of time expended, by personnel grade level, to prepare, approve and process travel orders and vouchers and associated the cycle time under traditional ("current") processes. The pilot programs also reported on customer satisfaction by authorizing officials and travelers under the current process. All pilot sites completed their baseline documentation.

- **Computation Module Validated.** DFAS initially sent test cases and edit checks to pilot sites designated to validate computation software in March 1996. Additional certification was required to be performed through February 1997, as vendors released subsequent software versions to operate in specific DoD electronic environments. Four computational software products received limited validation for pilot program testing.

- **Random Audit Plan.** Responsibilities and guidance for pre- and postpayment review of travel settlement claims were distributed to the DoD disbursing offices which process travel claims for the pilot test sites. Implementation of random audit procedures is being monitored by DFAS.

- **Electronic Signature Policy and Procedure.** The GAO approved waivers for the use of electronic signature in March 1996. DFAS then distributed implementing instructions to pilot sites and disbursing offices.

- **Training Completed.** Training was required on new responsibilities, entitlements, and procedures as well as on COTS computational software. The Department also developed travel authorizing official (AO) training.

Significant Accomplishments of the Pilot Test Program. The DoD TDY Travel Reengineering Pilot Test Program achieved significant accomplishments, and validated the TDY Travel concept of operations. The significant accomplishments include:

- Simplified personnel entitlement policies were issued.
- Random audit policy and procedures were implemented.
- COTS Computational software validation procedures were established.
- A Joint Military Service Central Billeting System is under development.
- A Defense Table of Official Mileages, common both to passenger and to freight traffic, is under development.
- Digital Signature technologies and infrastructure requirements were defined, and an innovative solution for DoD business systems is under development.

Major Lessons Learned. There were several major lessons learned from the pilot test program. They included:

- **Significant time** was required to implement and test the TDY travel concept of operations:

- Establish and Effect Policy Changes	9 to 12 months
- Acquire and Install Computation Software	4 to 6 months
- Develop COTS Computation Software Validation Procedure	2 to 12 months
- Validate COTS Computation Software/Implement "Workarounds"	2 months
- Develop/Install Commercial Travel Office (CTO) Software Interface	4 months
- Develop AO Training	3 months
- Complete Training	1 to 3 months

- **Significant functional requirements** were required to operate in a changed environment.

- **Connectivity.** Use of the common user interface (CUI) COTS computational software relied on unique electronic interfaces (user-defined files) in the pilot site environments. This significantly impeded connectivity, and required an effort to develop specifically designed programs which could interface with the Department's financial systems. The critical need for common, commercial EC/EDI standards was highlighted, because the Department's information infrastructure varies greatly at the installation level. The information infrastructure must be defined in advance of travel reform integration.

- **Systems administration.** Requirements for system administration related to digital signature and software tables are substantial, and require recurring training.

- **COTS Computational Software Validation.** Automation of unique federal entitlements and rules is difficult, even when the rules are simplified. For example, COTS software products did not include the full complement of internal controls for military-specific policies. Also, some policies changed during the test period. For example, meal rates were simplified to use proportional meal rates, when one or two meals were provided through

conference fees or in military dining facilities. However, existing COTS packages were not programmed to compute proportional meal rates in time to begin the test; they required later programming adjustments. Furthermore, the Department lacked automated, common, official mileage tables.

- **Cultural Barriers.** In order to end a "business as usual" mindset, senior leadership supported the breakdown of stove-piped functional policies and processes. Senior leaders also worked together to communicate change, and to realign priorities and resources so that pilot testing could be accomplished successfully.

- **Training Requirement.** Significant training is required to incorporate business process improvement. The training must communicate new policies and procedures, must emphasize new roles and relationships, and must allow sufficient lead time to complete training.

RESULTS

The pilot program testing of the DoD TDY Reengineered Travel concept of operations resulted in successful reengineered travel process demonstration, which interfaced authorization, computation, and commercial travel services. All test sites validated the use of some or all private sector sources, including COTS software to perform authorization, computation, and record retention, as well as use of individual government contractor-issued charge cards, Electronic Funds Transfer (EFT) of travel reimbursements, and Commercial Travel Office (CTO) performance of all travel arrangements.

The pilot test organizations documented significant decreases in the amount of labor costs of reengineered travel processes, while increasing customer satisfaction levels in many areas. Data submitted by the pilot organizations indicate that administrative labor costs have decreased by 56 percent, payment cycle time decreased by 48 percent, and traveler and authorizing official satisfaction increased by close to 100 percent on many critical indicators.[1] The test program yielded a robust body of performance and customer satisfaction data, which demonstrated that the Reengineered TDY Travel concept of operations was accepted. The Test Program demonstrated that the new concept of operations is workable in a variety of operational environments across the Department.

[1] Pilot labor process costs do not include automated system administration resources which have been utilized to support testing.

Figure 2-1
Travel Reengineering Pilot Site List

Department of the Army

Army Training and Doctrine Command, Combined Arms Center - Ft. Leavenworth, KS
Army Forces Command - Ft. McPherson, GA
Army Europe U.S. Army Military Community - Stuttgart, Germany
Army Materiel Command - Missile Command - Huntsville, AL
Army Corps of Engineers - Waterways Experiment Station - Vicksburg, MS
Army Corps of Engineers - Ohio River Division - Cincinnati, OH
HQ, Army Audit Agency - Alexandria, VA

Department of the Navy

Navy Activities - Norfolk, VA
  PSA Norfolk
  USS Eisenhower
  CINCLANTFLT
Naval Command, Control and Ocean Surveillance System Center - San Diego, CA
HQ, CINPACFLT - Pearl Harbor, HI
Naval Post Graduate School - Monterey, CA
Naval Undersea Warfare Center Division - Newport, RI
Marine Corps Air Station - Beaufort, SC
Marine Forces Reserve - New Orleans, LA

Department of the Air Force

Dover AFB, DE
Randolph AFB, TX
Peterson AFB, CO
Air Force 11th Wing - Bolling AFB - Washington, D.C.
Air Combat Command HQ and 1st Wing - Langley AFB, VA

Defense Agencies

The Joint Staff - Washington D.C.
Washington Headquarters Services - Designated organizations
Defense Finance and Accounting Service - Kansas City Center - Kansas City, MO
Defense Commissary Agency - HQs and Operations Center - Provisional - Ft. Lee, VA
Defense Logistics Agency - Ft. Belvior, VA
National Imaging and Mapping Agency (NIMA) (formerly DMA) - St. Louis
Defense Special Weapons Agency (DSWA) (formerly DNA) - Alexandria, VA
National Security Agency (NSA) - Ft. Meade, MD

SECTION 3
PERFORMANCE MEASUREMENT: PILOT TEST PROCESS IMPROVEMENTS

Performance Measurement. The following performance measures were used in the DoD Pilot Test program to evaluate the baseline process, the reengineered concept of operations, and the differences between the two. Analysis of the pilot test program data shows overall substantial reductions in numbers of process steps, process time, process cost, and cycle time from the old travel process to the reengineered travel process. A summary of the averages of baseline and new process data, as well as the percent of changes between the two, is at Figure 3-1.

- **Number of Steps in the Process.** The baseline average number of steps in the process was 40, compared with 21 for the new process (a 48 percent decrease).

- **Process Time.** Process time is the actual labor time spent by individuals performing travel-associated tasks--from authorizing and arranging the trip through voucher preparation, payment (reimbursement), and reconciliation--throughout each function of a trip requirement. The baseline average process time was 4.5 hours, while the reengineered average process time was 1.7 hours (a 63 percent decrease).

- **Process Cost.** Process cost is the cost, measured in dollars, of actual labor of individuals performing travel associated tasks throughout each function of each trip requirement. Process cost is derived from the process time data, multiplied by a weighted, normalized salary (including benefits) based on grade groupings. The salary data is based on FY 1995 dollars and is applied uniformly over time to normalize the data. The baseline average process cost was $93, compared with the reengineered average process cost of $41 (a 56 percent decrease).

- **Cycle Time.** Cycle time is the number of work days it takes to perform separately the pretravel process and the posttravel process for a travel instance. Cycle time includes both labor and idle time in its calculation. The baseline average postpayment cycle time was 11 days, while the reengineered average process cycle time was 6 days (a 48 percent decrease).

A Summary of Pilot Test Program process improvements is at Figure 3-2.

Figure 3-1
Pilot Data Comparison Summary

Pilot Site	Process Steps				Process Time (hours)				Process Cost				Cycle Time (days)			
	Old	New	Diff.	Percent	Old	New	Diff.	Percent	Old	New	Diff.	Percent	Old	New	Diff.	Percent
ARMY																
Army TRADOC - Ft. Leavenworth, KS	37	9	-28	-75.7%	5.44	1.26	-4.18	-76.8%	$113.85	$38.05	($75.79)	-66.6%	11	3	-8	-72.7%
Army FORSCOM - Ft. McPherson, GA**	34	18	-16	-47.1%	3.03	1.73	-1.30	-42.9%	$83.58	$52.21	($31.37)	-37.5%	21	10	-11	-52.4%
USA Military Community - Stuttgart	46	18	-28	-60.9%	15.68	2.49	-13.19	-84.1%	$427.70	$60.98	($366.72)	-85.7%	10	5	-5	-48.4%
COE - Waterways Experiment Station	28	10	-18	-64.3%	1.81	1.47	-0.34	-18.9%	$47.75	$33.45	($14.29)	-29.9%	9	7	-2	-23.5%
COE - Ohio River Division	34	N/A			1.60	N/A			$31.14	N/A			12	N/A		
Army Missile Command - Redstone	48	18	-30	-62.5%	9.05	0.67	-8.38	-92.6%	$228.07	$12.46	($215.62)	-94.5%	2	1	-1	-55.0%
HQ, Army Audit Agency	26	16	-10	-38.5%	4.10	2.63	-1.46	-35.7%	$104.44	$75.71	($28.72)	-27.5%	15	1	-14	-93.3%
NAVY																
Navy Norfolk																
USS Eisenhower	40	36	-4	-10.0%	2.50	2.28	-0.22	-8.6%	$48.62	$43.50	($5.12)	-10.5%	11	11	0	-2.9%
CINCLANTFLT	39	N/A			1.60	1.20	-0.40	-25.1%	$23.85	$27.01	$3.16	13.3%	11	N/A		
Personnel Support Activities	41	33	-8	-19.5%	2.11	0.75	-1.36	-64.6%	$43.54	$16.56	($26.97)	-62.0%	2	9	7	309.1%
NCCOSC RDT&E Division**	34	19	-15	-44.1%	3.36	1.99	-1.37	-40.7%	$69.01	$39.58	($29.43)	-42.6%	15	6	-9	-60.0%
HQ, CINCPACFLT	62	N/A			3.91	N/A			$77.43	N/A			12	N/A		
Naval Postgraduate School**	46	40	-6	-13.0%	5.78	2.17	-3.62	-62.5%	$94.61	$32.00	($62.61)	-66.2%	9	N/A		
Naval Undersea Warfare Center, RI	37	N/A			2.05	N/A			$43.92	N/A			14	N/A		
Marine Corps Air Station Beaufort, SC	36	13	-23	-63.9%	4.85	0.66	-4.19	-86.4%	$124.48	$13.98	($110.50)	-88.8%	4	7	3	85.7%
Marine Forces Reserve - New Orleans, LA****	(46)	(9)	(-37)	(-80.4%)	(11.38)	(9.92)	(-1.46)	(-12.9%)	($298.58)	($279.67)	(-$18.91)	(-6.3%)	(9)	(5)	(-4)	(-44.4%)
AIR FORCE																
Dover AFB, DE	46	9	-37	-80.4%	3.01	1.42	-1.58	-52.7%	$54.07	$26.25	($27.82)	-51.5%	7	2	-5	-71.4%
Randolph AFB, TX	49	N/A			4.02	N/A			$67.53	N/A			7	N/A		
Peterson AFB, CO	45	27	-18	-40.0%	2.54	2.26	-0.29	-11.3%	$49.40	$45.47	($3.93)	-8.0%	10	5	-6	-55.0%
11th Wing - Bolling AFB	28	28	0	0.0%	4.97	2.07	-2.90	-58.4%	$94.68	$51.15	($43.53)	-46.0%	5	3	-2	-40.0%
Langley AFB, VA*	67	N/A			7.39	N/A			N/A	N/A			N/A	N/A		
JOINT STAFF/DEFENSE AGENCIES																
The Joint Staff	48	N/A			3.82	2.30	-1.52	-39.8%	$94.99	$78.31	($16.68)	-17.6%	10	3	-7	-70.0%
Washington Headquarters Services **	49	26	-23	-46.9%	4.61	2.42	-2.19	-47.4%	$108.18	$69.17	($39.00)	-36.1%	14	5	-9	-64.3%
DFAS - Kansas City	26	8	-18	-69.2%	4.60	1.05	-3.56	-77.3%	$67.46	N/A	N/A	N/A	3	1	-2	-66.7%
Defense Commissary Agency HQ**	69	26	-43	-62.3%	5.21	1.73	-3.48	-66.8%	$87.40	$45.75	($41.65)	-47.7%	28	7	-21	-75.0%
Defense Logistics Agency	22	13	-9	-40.9%	1.84	1.20	-0.64	-34.7%	$36.95	$32.67	($4.28)	-11.6%	14	16	2	14.3%
National Imagery and Mapping Agency (NIMA)	36	28	-8	-22.2%	2.60	1.07	-1.53	-59.0%	$58.23	$23.02	($35.21)	-60.5%	4	9	5	122.7%
Defense Special Weapons Agency (DSWA)	12	N/A			6.34	N/A			$136.13	N/A			2	N/A		
National Security Agency (NSA)***	N/A	N/A			8.20	N/A			$371.00	N/A			42	N/A		
Average	40	21	-19	-48.3%	4.5	1.7	-2.84	-63.2%	$92.96	$40.87	($52.10)	-56.0%	11.3	5.8	-5	-48.3%

* Information determined from one time non-standard submission; no grade data available.
** Information based on a single cost analysis report.
*** Information gathered from briefings.
**** Information not included in average. Site did not implement any part of the concept of operations and automation not included in data.

Figure 3-2
Pilot Data Process Improvements

(Averages)	Old System	New System	% Change
Pilots Reporting	27	21	
Process Steps	40	21	- 48%
Process Time (hours)	4.5	1.7	- 63%
Process Cost	$93	$41	- 56%
Cycle Time (days)	11	6	- 48%

SECTION 4
PERFORMANCE MEASUREMENT:
PILOT TEST CUSTOMER SATISFACTION IMPROVEMENTS

Customer Satisfaction. In addition to performance measurement of processes, the Department determined that customer satisfaction would be an important performance measure in the test of improved travel processes. A customer satisfaction survey was developed, consisting of 36 customer satisfaction measures at all functional areas of the reengineered process. Test organizations were asked to have both the traveler and the AO complete the questionnaire for each unique travel instance, for both the old travel system and the reengineered process.

Favorable Customer Satisfaction Results. The customer satisfaction results clearly indicate that travelers and authorizing officials endorse the DoD TDY Travel Reengineering concept of operations. As presented in Tables 4-1 and 4-2, baseline comparisons between the current travel process and the reengineered process identify a substantial improvement in customer satisfaction. All 36 customer satisfaction measures developed from the concept of operations for travelers and AO's increased, with customers reporting significant, sustained improvement across all functional areas of the reengineered process. The results indicate that customers considered the reengineered process to be faster, easier, and more fair than the current system. At the same time, customers indicate the need for DoD to continuously improve the travel system processes, especially in the areas of simplifying entitlements, training, and improving the commercial travel software packages which supported the tests.

Highlights of the Survey. Highlights of the customer satisfaction improvements include results in several critical areas:

- **Overall System.** Better, faster, easier travel. Overall travel process supports mission requirements. Fairer and more equitable travel system. Travel system treats stakeholders as honest customers.

- **Travel Rules.** Easier to understand travel rules.

- **Travel Orders and Trip Records.** Easier to complete travel orders and trip records. Faster approval of travel orders and trip records. Better information to approve travel orders.

- **Commercial Travel Office.** Better travel services from the commercial travel office. Better, faster, easier round-the-clock access to travel services.

- **Travel Arrangements.** Better information and guidance about travel arrangements.

- **Charge Card.** Better management acceptance of the DoD Travel Charge Card. Better information about individual responsibility for use of the DoD Contractor issued travel charge card.

- **Costs and Reimbursements.** Easier understanding of travel costs and reimbursements. Faster travel reimbursement payments. Better, easier, faster electronic fund transfer (EFT) for travel reimbursement.

- **Management Information/Internal Controls.** Better travel management information system (MIS) for budgeting and arranging travel. Better system of internal controls.

- **Administrative Burdens.** Less paper intensive travel system. Reduces administrative burden.

TABLE 4-1
BASELINE COMPARISON OF TRAVEL SYSTEMS
TRAVELERS

Areas of Strength
Higher Customer Satisfaction Scores

	Baseline	Current	Percent Improvement
1. Travel too paper intensive *(less is better)*	4.05	2.72	32.8
2. Idea of split-disbursement payments to bank and AMEX	2.47	4.25	72.1
3. Electronic Fund Transfer (EFT) for travel	2.58	3.87	50.0
4. Commercial Travel Office (CTO) service	2.66	3.74	40.6
5. Travel supports mission requirements	2.21	3.73	68.8
6. Easy to complete travel orders	2.21	3.70	67.4
7. Easy to approve travel orders	2.19	3.68	68.0
8. Treats as honest customer	1.86	3.51	88.7
9. AMEX ATM cash advance policy	2.10	3.50	66.7

Opportunities for Improvement
Lower Customer Satisfaction Scores

	Baseline	Current	Percent Improvement
10. Quick payment of travel vouchers	1.84	3.49	89.7
11. Individual's responsibility regarding AMEX	1.98	3.49	76.3
12. Fair and equitable travel system	1.60	3.40	112.5
13. Information on travel arrangements and guidance	2.36	3.37	42.8
14. AMEX merchant acceptance	2.52	3.35	32.9
15. Easy travel rules	1.73	3.29	90.2
16. CTO round-the-clock telephone *service*	2.77	3.15	13.7
17. CTO round-the-clock telephone *access*	2.73	3.00	9.9
18. Understand reimbursable travel expenses	1.76	2.92	65.9

TABLE 4-2
BASELINE COMPARISON OF TRAVEL SYSTEMS
AUTHORIZING OFFICIALS

Areas of Strength
Higher Customer Satisfaction Scores

	Baseline	Current	Percent Improvement
1. Travel too paper intensive *(less is better)*	4.31	2.88	33.2
2. Treats as honest customer	2.14	3.99	86.4
3. Fair and equitable travel system	2.16	3.97	83.8
4. AMEX ATM cash advance policy	2.61	3.92	50.2
5. AMEX merchant acceptance	2.14	3.82	78.5
6. Individual's responsibility regarding AMEX	2.11	3.80	80.1
7. Quick payment of travel vouchers	2.07	3.77	82.1
8. Reduces administrative burden	2.06	3.77	83.0
9. Travel supports mission requirements	2.29	3.72	62.4
10. CTO round-the-clock telephone *access*	2.37	3.71	56.5
11. Sound system of internal controls	2.37	3.67	54.9

Opportunities for Improvement
Lower Customer Satisfaction Scores

	Baseline	Current	Percent Improvement
12. Commercial Travel Office (CTO) Services	2.65	3.45	30.2
13. Easy to approve travel	2.51	3.44	37.1
14. Easy travel rules	1.93	3.31	71.5
15. MIS travel budget information	2.07	2.93	41.5
16. Understand travel costs	2.18	2.90	33.0
17. MIS travel arrangement information	2.09	2.74	31.1
18. Information to approve travel	2.54	2.66	4.7

SECTION 5
LEGISLATIVE AND REGULATORY IMPEDIMENTS

Legislative Changes. The Travel Reengineering Task Force identified several legislative impediments to the successful implementation of travel reform. The following legislative changes subsequently were made in the fiscal year 1997 National Defense Authorization Act. These changes were tested partially in the TDY Travel Reengineering Pilot Programs.

- 10 USC Section 1589: Civilian Use of Government Lodging. Repealed prohibition to pay lodging expense to civilian employee who does not use adequate available government housing. The effect of the repeal permits flexibility by a resource manager to determine, on a case-by-case basis, the most efficient and cost-effective utilization of total travel dollars. It also permits DoD resource managers to approve travel plans which are appropriate for the specific requirements of the travel mission. The legislation was enacted in October 1996, and was implemented DoD-wide in December 1996.

- 31 USC Section 1348: Repeal of the long-distance telephone certification requirement. Eliminated requirements enacted in 1939 for separate receipt documentation and certification of long distance telephone calls. The repeal eliminated onerous and administratively costly certification and documentation requirements. The legislation required implementing action by the General Services Administration (GSA), which incorporated it into the Federal Travel Regulation (FTR) in January 1997. It has been implemented by DoD.

- 5 USC Section 5707: Fire & Safety Act (FSA) Reporting. Amended only the reporting requirement, for agencies to report the percentage of roomnights that employees on official travel spend in hotels/motels which meet the fire safety requirements in the statute. (Safety requirements remain, only the reporting requirement was eliminated.) The legislation required implementing action by GSA, which incorporated it into the Federal Travel Regulation (FTR). The DoD has implemented this provision, and requires Commercial Travel Offices (CTOs) to book commercial lodging in FSA-compliant businesses as available.

Regulatory Barriers. The Travel Reengineering Task Force identified, in 1995, a number of regulations which--if not waived or changed--would prohibit implementation of some aspects of the concept of operations. These regulations include:

- Department of Defense Financial Management Regulation (FMR). An addendum to FMR Volume 5 (Disbursing Policy Procedures) was established to address general guidelines and policy for statistical sampling and pre- and postpayment examination requirements of disbursement vouchers.

Also, the Department updated Volume 9, "Travel Policy and Procedures." Chapter 10 of this volume specifically addresses the DoD Travel Reengineering pilot test sites and the applicability of special entitlement rules issued by the Per Diem Travel and Transportation Allowance Committee (PDTATAC), described below.

- Joint Travel Regulations/Joint Forces Travel Regulation (JTR/JFTR). The Department developed Simplified Entitlements in March 1995, which were published as appendices to the JTR, Volume II, Appendix K (for civilian travel) and JFTR, Volume I, Appendix O (for uniformed member travel), specifically for use by the test organizations. It also is the regulatory basis for the entitlements' portion of the DTS. The simplified regulations reduced the Department's TDY travel entitlements regulations to 17 pages. The Simplified Entitlements and changed policies include:

- **Maximum Use of Government-Contractor Issued Charge Card for Travel Expenses;**
- **75 percent Meals and Incidental Expenses (M&IE) on the First and Last Days of Travel;**
- **Proportional Rate Computation, for use when a traveler lodges in government quarters, but some government-provided meals are not available;**
- **Elimination of Requirement for Paper Nonavailability Statements;**
- **$75 Receipt Threshold for Business Expense Receipts (an increase from the $25 threshold established in 1962);**
- **Acceptability of Faxed, versus original copy, Signature and Receipts;**
- **Reduced Authorizing Official Documentation for the Travel Request and the Claim for Reimbursement (DD Forms 1610 and 1351-2);**
- **Registration Fees for Conference Charged to Object Class 21 (a budgetary class designated for travel, versus training);**
- **Standard use of Electronic Funds Transfer (EFT) for payment of Travel Reimbursement;**

- **Random Audit, versus 100 percent examination, of the Travel Voucher (claim for reimbursement).**

Regulations of Other Government Agencies. The Department has been engaged in a cooperative effort with several other Government agencies to make necessary changes in their regulations affecting business travel. These include regulations pertaining to receipt retention (Internal Revenue Service), digital signature (General Accounting Office), and records retention (National Archives and Records Administration).

SECTION 6
WHAT THE TEST PROGRAM ACCOMPLISHED

Validation of the DoD TDY Travel Reengingeering Concept of operations. The Pilot Test program validated the DoD TDY Travel Reengineering concept of operations, identified by the DoD Task Force to Reengineer Travel. Specifically, the test program validated (1) the reliability of private sector capabilities to facilitate travel arrangements, approval, and financial management processes, (2) the delegation of decision-making authority to the Authorizing Official (AO), who has the travel mission, and (3) implementation of random, versus 100 percent pre- or postpayment reviews of travel claims. Additionally, the test program identified the issue that the simplified entitlements were, according to many, not simple enough.

Revolution Rather than Evolution. A significant lesson learned from the DoD TDY Travel Reengineering Test Program is that effecting change on a massive scale is not supported by incremental, evolutionary change. Changing the Department's travel system required a revolution in the Department's approach to basic business processes.

Establishment of Baseline Performance Measurement. The pilot test program established the baseline performance measurements - and therefore the inefficiency of-- the current travel process. Through the data collection effort, the following features were documented: the number of steps in the process; the time and cost of the process; cycle time; and the level of customer satisfaction. Establishing this baseline allowed us to determine the amount of change which was accomplished by using the reengineered processes.

Establishment of Reengineered Process Performance Measurement. The Test Program established the reengineered process performance measurements. Through the data collection effort, the following features were documented: the number of steps in the process; the time and cost of the process; cycle time; and the level of customer satisfaction. Establishing the reengineered process performance measurement allowed DoD to determine efficiency of the reengineered system.

Initial Identification of Industry Capabilities. The Test Program provided an opportunity to identify initial industry capabilities in the areas of commercial travel services, charge card services, and common user interface software. The pilot process exposed the government to commercial service opportunities in an industry undergoing dramatic changes in service delivery, explosion of information technology, and cost cutting pressures on the travel arrangement and inventory distribution processes.

Achievement of DoD Component Buy-In. Because the pilot organizations operated throughout all the Military Services and in several Defense Agencies, the Test Programs received the scrutiny of diverse operational levels within DoD. The Department was able to

obtain a greater degree of component buy-in through successful implementation of the concept of operations across a broad test base, extensive organizational engagement, and active senior leadership management and oversight. In addition, partnership with the DoDIG and GAO ensured that strong internal controls were retained in the concept of operations.

Use of Lessons Learned to Refine Long Term Acquisition Strategy. The Department will apply the lessons learned from the Test Program to the Acquisition Strategy for Defense Travel System (DTS). The lessons learned from the Test Program include:

- **Time Lines.** Conducting the Pilot Test Program required longer time periods than was originally expected. Many barriers, such as lack of electronic connectivity between COTS software programs and the pilot test environments, and the initial inability of industry to react in a timely fashion to policy changes were unforeseen and caused delays.

- **Connectivity.** The Test Program documented the importance of having local area networks (LAN), intranets, and other forms of connectivity already in place. A major issue arose at one pilot site, which was unable to begin testing until early 1997 because its lease prohibited the installation of a LAN.

- **Charge Card Issues.** Maximum use of charge cards to purchase individual commercial airline tickets was encouraged by the concept of operations. However, several issues relating to charge cards arose during the course of the Test Program, including the unwillingness to process individual charge card purchases by some CTOs.

- **Leadership.** The commitment of senior leadership to process change was integral to the success of the reengineering program. Continued active support by key stakeholders, including Congress, GAO, and other executive agencies has been a critical success factor.

- **Feedback and Communication.** As would be expected, one of the most important lessons learned during the test program was the importance of feedback and communication. Establishing a rapid and effective method of communicating with multiple organizational levels was imperative to coordinating policy and procedural changes, overcoming internal and external impediments, resolving commercial vendor concerns, and obtaining organizational acceptance and "buy-in" of the reengineered travel process.

- **Digital Signatures and Public Key Infrastructure.** One of the Departments goals was to move into a paperless environment and have travel orders and vouchers signed electronically. This meant that the ink pen as we know it today would be quickly moving to a lesser used tool; however, the cost of performing digital signatures using hardware tokens was extremely expensive and the Public Key Infrastructure (PKI) was not ready to accommodate our demands on such a large scale.

To solve the hardware token problem, DoD, in a joint venture with the National Institutes of Science and Technology and the Department of Energy, developed a software specification that could be used in a low risk environment to digitally sign documents. This was a major

breakthrough for the federal sector and opened the door to a much more cost effective method of becoming paperless. Industry quickly recognized the impact that this could have on future users and embraced the software token concept.

The issue of PKI is much more complicated. Within the federal sector, there has been little movement to get an infrastructure operating that can service millions of customers. DoD needed to have such an infrastructure to attain our goal of a paperless process. As a result, the Defense Information Systems Agency and the National Security Agency have stepped forward to lead the way for the DoD PKI that can provide for digital signature. The DoD will test this concept in a large scale environment in the first contract that will be issued this fall for the DTS.

SECTION 7
NEXT STEPS: THE DEFENSE TRAVEL SYSTEM

Milestones. The test program provided valuable information about the reengineered travel process. In December 1995, a Project Management Office was established to initiate acquisition management for the follow-on "Defense Travel System" (DTS). A Request for Proposal (RFP) was drafted. Initial meetings with industry were begun in January 1996; industry comment periods to the draft RFP were conducted in 1996 and 1997 using Internet services. In January 1997, senior DoD leaders approved the acquisition strategy for the DTS. The source selection authority has been designated, and resource requirements have been identified. The RFP for travel management services in Defense Travel Region (DTR) 6 will be released in June 1997; contract award is estimated for December 1997. System testing is planned for the second quarter of FY 1998, and incremental worldwide implementation is expected to begin in April 1998.

Acquisition Approach. The acquisition approach determined by the Department for the DTS includes the following:

- Incorporate best industry practices;
- Use performance-based specifications;
- Utilize federal and commercial information technology standards to minimize interface risks; and
- Acquire overall best value.

Lessons Learned from Pilots. Several of the lessons learned from the pilot test program have been incorporated into the RFP. These include: standards for ease of use of the common user interface; the need for a communications plan and standardized training prior to implementation of the system; inclusion of mechanisms for partial payments for long-term TDY, ticket delivery, group travel, and invitational travel orders; and standards for customer support.

Deployment of the DTS. The Department has determined that implementation of the DTS will be deployed on an incremental basis. The DTS will be implemented first in Defense Travel Region (DTR) 6, an eleven-state area in the upper Midwest United States which contains 70 major installations. The first contract will include the common user interface (CUI) for computational software, plus traditional commercial travel office (CTO) services. The CUI selected in the first contract will be used throughout the Department. It will provide "the same look, touch, and feel" to DoD military members and civilian employees worldwide. Follow-on contracts will acquire commercial travel services only.

SECTION 8
SECTION 356 OF THE
FY 1996 NATIONAL DEFENSE AUTHORIZATION ACT

Requirement to Evaluate Options to Improve Travel Management. Section 356 of the FY 1996 National Defense Authorization Act, "Program for Improved Travel Process for the Department of Defense," required the Secretary of Defense to conduct a program to evaluate options for making improvements to the Department's travel management process. The Secretary was to compare the results of the tests to determine which travel process tested is the better option to effectively manage travel of Department personnel.

DoD Compliance with Section 356. The FY 1996 Defense Authorization Act, with Section 356 requirements, was enacted on February 10, 1996. As documented in Section 2 of this Report, the DoD Test Program had long been in place by the time that the Act was enacted. Although twenty-seven DoD Travel Reengineering Pilot Programs were designated in June 1995, the Department otherwise is in general compliance with the requirements of Section 356.

Comparison of Section 356 Test Program with DoD Pilot Test Program.

Section 356 Test Program:	DoD Pilot Test Program:
Test at 3 to 6 military installations.	Tested at 27 installations in Defense-wide Components.
Implement changes proposed...by the task force on travel management established in July 1994.	Implemented changes proposed...by the task force on travel management established in July 1994.
Manages and uniformly applies that travel process.	Managed and uniformly applied that travel process.
Provides opportunities for private-sector sources to provide travel reservation services and credit card services to facilitate that travel process.	Provided opportunities for private-sector sources to provide travel reservation services and credit card services to facilitate that travel process.

(Section 356)	(DoD Pilot Test Program)
Enter into one or more contracts with a private-sector source pursuant to which the private sector source manages the DoD travel process...provides for responsive, reasonable prices services...and uniformly applies the travel process....	Modified 12 current contracts and entered into 14 contracts to which the private sector sources supported parts of the travel process. Contracts supported the existing pilot organizational structure, in accordance with the recommendations of the DoD Task Force.
Provides for the performance by employees of the Department of only those travel functions, such as travel authorization, that the Secretary considers to be necessary to be performed....	Provided for the performance by employees of the Department of only those travel functions, such as travel authorization, that the Secretary considers to be necessary to be performed, in accordance the recommendations of the DoD Task Force.
Test to begin not later than 60 days after enactment of the Act (February 10, 1996) and end 2 years after the date on which it began... and conducted in accordance with the guidelines for travel management issued for the Department by the Under Secretary of Defense (Comptroller) -- USD(C).	Tests began July 1, 1995, as designated by USD(C) letter, and ended on March 31, 1997. Tests were conducted in accordance with the recommendations of the DoD Task Force, as accepted by USD(C).
Evaluation criteria, at a minimum, to include the extent to which a travel process provides for the following:	Evaluation criteria include:
(1) coordination, at the time of a travel reservation, of travel policy and cost estimates with the mission which necessitates the travel.	(1) coordination, at the time of travel reservation, of travel policy and "should cost" estimates with the AO's approval that the mission necessitates the travel.

(Section 356)	(DoD Pilot Test Program)
(2) the use of fully integrated travel solutions envisioned by the travel reengineering report of the DoD dated January 1995.	(2) the use of fully integrated travel solutions envisioned by the travel reengineering report of the DoD dated January 1995. (Note that existing contracts had to be considered in meeting this criteria.)
(3) the coordination of credit card data and travel reservation data with cost estimate data.	(3) the coordination of credit card data and travel reservation data with cost estimate data could not be accomplished in an automated method under existing charge card contracts for individual cards.
(4) elimination of the need for multiple travel approvals through the coordination of such data with proposed travel plans.	(4) the duties of the Authorizing Official (AO) eliminated the need for multiple travel approvals through the AO's review and approval of planned and actual Trip Record information transmitted in the COTS software program.
(5) a responsive and flexible management information system that enables the USD(C) to monitor travel expenses throughout the year, accurately plan travel budgets for future years, and assess...the relationship between the cost of travel and the value of the travel to the mission which necessitates the travel.	(5) used a responsive and flexible management information system (MIS) embedded in COTS software supporting the Pilot Tests, to enable USD(C) Pilot Program designees to monitor travel expenses throughout the fiscal year, accurately planned travel budgets for the remainder of the fiscal year, and assess the relationship between the cost of travel and the value of the travel to the mission which necessitates the travel.

(Section 356)	(DoD Pilot Test Program)
Conduct a Plan for a Test Program by addressing:	
(1) The purposes of the program, including the achievement of an objective of reducing by at least 50 percent the total cost incurred by DoD annually to manage the DoD travel process.	(1) Accomplished a decrease of 56 percent in documented reengineered travel process costs.
(2) The methodology and anticipated cost of an arrangement pursuant to which a private-sector source would receive an agreed-upon payment plus an additional negotiated amount that does not exceed 50 percent of the total amount saved in excess of the objective.	(2) Pilot Program Test Plans addressed acquisition plans; private-sector sources received agreed upon payment which varied by specific contract modified. In some cases, vendors provided software on a test basis; in other cases, licenses were purchased.
(3) A specific citation to any provision or law, rule, or regulation that, if not waived, would prohibit the conduct of the program or any part of the program.	(3) Statutory and regulatory changes were made as described in Section 4 of this Report.
(4) The evaluation criteria established pursuant to Section 356.	(4) Evaluation criteria of Pilot Tests are identified in the Performance Measures discussed in Sections 3 and 4 of this report.
(5) A provision to implementing throughout the Department the travel process determined to be the better option to effectively manage travel of Department personnel on the basis of a final assessment of the results of the program.	(5) The lessons learned from the Pilot Test program were included in the acquisition strategy for the Defense Travel System (DTS), as described in Section 6 of this report. **Note: Pilot Programs tested the DoD Reengineered TDY Travel concept of operations.** They did not test the advantages of one COTS software package over another, since all COTS software packages were required to be modified over time to meet specific DoD travel policies. COTS software was only used to support the Pilot Tests of the concept of operations.

(Section 356)	(DoD Pilot Test Program)
Report: After the first full year of the conduct of the tests...submit a report on the implementation of the program. The report shall include an analysis of the evaluation criteria established....	Due to significant start-up requirements to establish the, baseline data, Pilot Testing of the reengineered travel process began in October 1996 and was completed in March 1997. The DoD Report on the implementation of the test program is being submitted in June 1997, and includes an analysis of evaluation criteria.